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Title	Species of the genus Bembidion from Mt. Hiko, Kyushu (The Carabidae-fauna of Mt. Hiko, X) (Coleoptera)
Author(s)	HABU, Akinobu
Citation	INSECTA MATSUMURANA, 21(1-2): 69-73
Issue Date	1957-08
Doc URL	http://hdl.handle.net/2115/9614
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Type	bulletin
Additional Information	



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SPECIES OF THE GENUS *BEMBIDION* FROM MT. HIKO, KYUSHU

(The Carabidae-fauna of Mt. Hiko, X)

(Coleoptera)

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As a part of the Carabidae-fauna of Mt. Hiko, I have listed the *Bembidion*-species collected at the area above 600 m. in altitude. Two of them were already introduced in Mushi, Vol. 28, Pars, 5, pp. 43-47 (1955) by HABU and S. UÉNO.

List of the Species from Mt. Hiko

1. *Bembidion* (*Pseudolimnaeum*) *galloisi* NETOLITZKY
1938: *Bembidion* (*Pseudolimnaeum*) *galloisi* NETOLITZKY, Proc. Ent. Soc. Lond., Ser. B, 7 (3): 52.
2. *Bembidion* (*Pseudolimnaeum*) *kyushuense* sp. nov.
3. *Bembidion* (*Peryphus*) *pseudotucillum* NETOLITZKY
1938: *Bembidion* (*Peryphus*) *pseudotucillum* NETOLITZKY, Proc. Ent. Soc. Lond., Ser. B, 7 (2): 37-38.
4. *Bembidion* (*Peryphus*) *morawitzi* CSIKI
1928: *Bembidion morawitzi* CSIKI, Col. Cat., 97: 104.
5. *Bembidion* (*Peryphus*) *semilunium* NETOLITZKY
1914: *Bembidion semilunium* NETOLITZKY, Ent. Mit., 3 (6): 170.
6. *Bembidion* (*Peryphus*) *hikosanum* S. UÉNO
1954: *Peryphus* (*Peryphus*) *hikosanus* S. UÉNO, Shin Konchû, 7 (4): 54, 57.
1955: *Peryphus* (*Peryphus*) *hikosanus* HABU et S. UÉNO, Mushi, 28 (5): 43-45.
7. *Bembidion* (*Peryphus*) *misellum* HAROLD
1877: *Bembidion misellum* HAROLD, Deutsche Ent. Zeit., 21 (2): 342.
1883: *Bembidion nikkoense* BATES, Trans. Ent. Soc. Lond.: 272.
8. *Bembidion* (*Aptenidium*) *nipponicum* S. UÉNO
1954: *Hydrium* (*Aptenidium* subgen. nov.) *nipponicum* S. UÉNO, Shin Konchû, 7 (5): 46.

1955: *Hydrium* (*Aptenidium*) *nipponicum* HABU et S. UENO, Mushi, 28 (5): 46-47.

Bembidion (*Pseudolimnaeum*) *kyushuense* sp. nov.

"Kyûshû-munemizo-mizugiwa-gomimushi"

Description. Length 5.0-6.3 mm. Width 1.9-2.2 mm.

Black, slightly reddish, shiny; labrum and mandibles somewhat dark reddish brown, palpi brown or yellowish brown, antennae and legs reddish brown, apical

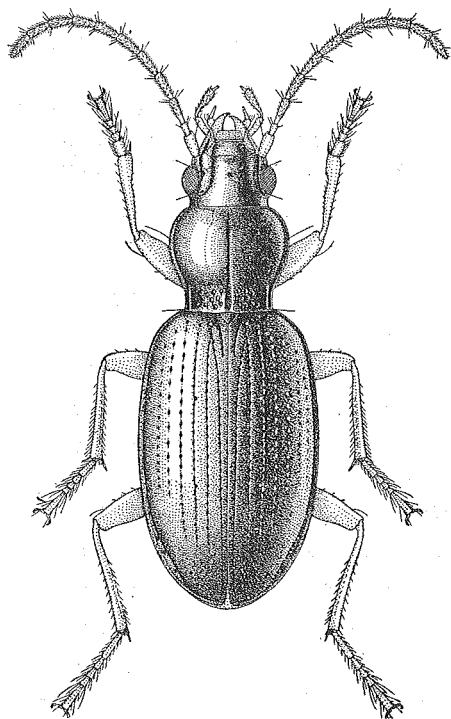


Fig. 1. *Bembidion* (*Pseudolimnaeum*) *kyushuense* sp. nov. (♂)

part of elytra sometimes slightly pale; underside dark reddish.

Head weakly convex; surface impunctate, not rugose or sometimes with a few faint wrinkles between frontal furrows; microsculpture isodiametric, distinct at anterior half, somewhat faint at posterior half part; posterior supraorbital pores located rather remote from eyes, on or slightly before imaginary line connecting posterior margin of each eye; eyes relatively weakly convex; frontal furrows moderately deep, curving posteriorly and extending a little beyond pos-

terior supraorbital pores; lateral carinae rather distinct; frons with two small depressions, anterior one shallow, sometimes faint, placed behind front-clypeal suture, posterior one smaller than anterior one, but somewhat deeper, placed on imaginary line connecting each anterior supraorbital pore; fronto-clypeal suture distinct; clypeus convex at medio-basal part, apex straight; apex of labrum feebly arcuate; antennae reaching basal one-third of elytra, segment 3 as long

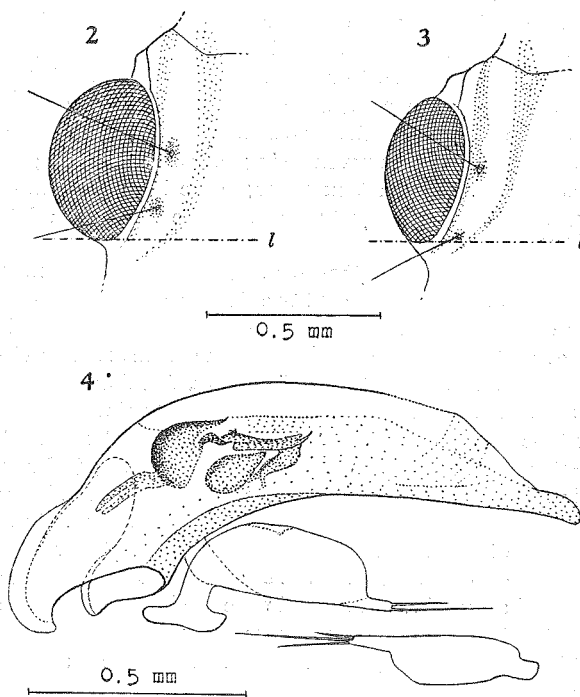


Fig. 2. Left eye and supraorbital pores in *B. galloisi* (♂) 3. Do. in *B. kyushuense* sp. nov. (♂) *l* Imaginary line connecting the hind margin of each eye. 4. Male genitalia of *B. kyushuense* sp. nov.

as or slightly longer than segment 4; penultimate segment of maxillary palpi one-and-one-fifth or -sixth times as long as segment 3 of antennae; tooth of mentum pointed and sharp at apex, stout, a little shorter than lateral lobes.

Prothorax convex, cordate, widest at apical one-third; in holo- and allotype one-and-one-fourth times as wide as head, one-and-one-sixth or -seventh times as wide as long, maximum width one-and-three-sevenths times as wide as basal width; surface on disk impunctate but with some transverse wrinkles, these

sometimes rather evident, sometimes faint, on anterior transverse impression with some longitudinal short wrinkles and a few small punctures, on basal area with some gross punctures; microsculpture rather faint, forming somewhat transversely wide meshes; apical margin straight, bordered except median part; apical angles fairly obtuse and somewhat rounded; base nearly as wide as or a little wider than apex, basal margin feebly arcuate, unbordered; basal angles rectangular; basal carinae rather distinct, separated from lateral margin by fine but deep lateral channels; lateral sides finely but distinctly bordered, strongly rounded from widest point to apical and basal angles, but fairly sinuate before basal angles and thence parallel to median line as far as basal angles; anterior marginal setae inserted at one-third, posterior marginal setae almost on basal angles; median line deep and rather wide, not reaching apical margin, reaching basal margin, basal wider part uneven owing to some punctures; anterior transverse impression faint, somewhat extending posteriorly along median line, posterior transverse impression distinct; basal foveae very deep; lateral channels narrow but distinct.

Winged. Elytra elliptic, rather convex, widest at about middle; one-and-one-half times as wide as and two-and-two-thirds or two-and-three-fourths times as long*) as prothorax, fully more than one-and-one-half times as long as wide; smooth; microsculpture absent at basal two-thirds, but faintly visible at about one-third area, somewhat distinct at apical part, forming somewhat transverse wide meshes; shoulders indistinct, rounded; lateral border rounding on shoulder and reaching base of stria 5; lateral side gently rounded from behind shoulder to about two-thirds, thence moderately rounded to apex, apical sinuation faint; apex rounded; striae fine, shallow, but rather distinct, distinctly punctate, stria 1 complete, other striae becoming fainter towards apex and entirely abbreviated before apex, striae 1 and 2 arising from basal umbilicate pore, striae 6 and 7 consisting of only row of punctures, stria 8 rather deep throughout, apical striole absent or vestigial; scutellar striole moderately long, deeper than other striae; intervals almost flat, interval 3 with two dorsal pores behind one-fourth and at about three-fifths, both adjoining stria 3 and equal in size; humeral series of umbilicate pores normal.

Proepisterna and mesoepisterna with some large punctures; metasternal process not bordered.

Male genitalia well chitinized; aedeagus elongate, gently arcuate and tapering towards apex in lateral view; apex rather long, narrowly rounded; basal orifice wide, fairly attaining dorsal side, right basal lobe relatively large; ventral side uniformly gently arcuate; left paramere relatively narrow, with two setae at apex, right paramere a little shorter and narrower than left paramere, with three setae at apex.

Type locality. North Kyushu, Japan.

Types. Holotype: 1♂, Mt. Hiko, Fukuoka Prefecture, XI. 3, 1952, A. HABU

* Measured from the base of the scutellar striole to the apex of the elytra.

leg., at about 900 m. in altitude, under stone near the streamlet. Allotype: 1 ♀, the same locality and date. Paratypes: 25 ex., the same locality, from 670 to 900 m. in altitude.

Remarks. This new species is rather resembling to *B. (Pseudolimnaeum) galloisi* NETOLITZKY, but may easily be distinguishable by the under-mentioned characteristics: the colour of the elytra is shiny black, more or less brownish, but it is somewhat greenish in *B. galloisi*; the eyes are less convex, the posterior supraorbital setae are inserted a little more remote from the eyes and on or slightly before an imaginary line connecting the posterior margin of each eye (fig. 3), while in *B. galloisi* the eyes are evidently protrudent, the hind supraorbital pores are fairly before an imaginary line (fig. 2); the prothorax is somewhat more convexed, slightly narrower (one-and-one-sixth or -seventh as wide as long in this new species, whereas one-and-one-fifth or -sixth in *B. galloisi*), the lateral sides are more contracted posteriorly, so the base is proportionally somewhat narrower; the form of the elytra slightly differs, namely, the shoulder is more indistinct and the lateral side is somewhat more rounded from the shoulder to beyond the widest part than in *B. galloisi*; the elytra are without microsculpture except the apical area, where the microsculpture is forming a little transversely wide meshes, while on the elytra of *B. galloisi* we can see the isodiametric microsculpture throughout though very faint; the punctures on the elytral striae are somewhat larger; the ventral side of the aedeagus is, in lateral view, gently arcuate, but it is slightly swollen near the middle in *B. galloisi*.

Moreover, in addition to the above morphological differences, this new species seems to have no positive phototropism: I have not had any specimen attracted to lights, though most of the specimens of *B. galloisi* in my collection were taken at lights.

This species is also rather agreeing with the brief description of *B. (Pseudolimnaeum) aeneoviridimicans* NETOLITZKY from Mt. Kinfushan, in China, but the punctures on the basal part of the prothorax and on the underside are not larger compared with those of *B. galloisi*, though the punctures on the elytral striae are somewhat larger; the colour is not greenish, but in the species of China the colour which is not mentioned in NETOLITZKY's description, judging from the specific name, seems to be coppery-green; the microsculpture on the elytra is visible on the apical part, whereas it is wholly absent in *B. aeneoviridimicans*.